

**BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA**

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IN THE MATTER OF APPLICATION FOR)	
BENEFICIAL WATER USE PERMIT NO. 41H)	FINAL ORDER
11546900 BY ZOOT PROPERTIES LLC)	

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The hearing examiner entered the proposal for decision in this matter on February 16, 2005. The proposal recommended granting the permit in modified form. Applicant and Objectors Faust, Kolnick, and McManus each filed timely written exceptions and requested oral argument and each filed timely written responses to the other's exceptions. Objector Sales did not file exceptions or timely request oral argument. Oral argument was held on May 5, 2005.

STANDARD OF REVIEW

The standards for this review are provided by Mont. Code Ann. § 2-4-621(3) as follows :

The agency may adopt the proposal for decision as the agency's final order. The agency in it final order may reject or modify the conclusions of law and interpretation of administrative rules in the proposal for decision but may not reject or modify the findings of fact unless the agency first determines from a review of the complete record and states with particularity in the order that the findings of fact were not based upon competent substantial evidence or that the proceedings on which the findings were based did not comply with essential requirements of law.

Under these standards the Department may not put itself in the shoes of the hearing examiner and reweigh the evidence, *State v. Shodair Hospital*, 273 Mont. 155, 902 P. 2d 21, (1995), and whether or not, more, different, or better data could have been presented, is not a consideration of the review. If there is substantial competent evidence in the record to support the hearing examiner's findings and the Department agrees with the hearing examiner's applications and interpretations of the law, the proposal for decision must be upheld.

DISCUSSION

Objectors' Exceptions

Objectors' exceptions specifically target the hearing examiner's findings of fact no. 22 & 23 and conclusion of law no. 1 that the West Gallatin River is a gaining stream, that the ground water is not immediately or directly connected to the surface water, and that the Application is not subject to the Upper Missouri River basin closure. See Mont. Code Ann. §§ 85-2-342 and

85-2-343. The Department will review these findings and the conclusion under the standards cited above.

The Department agrees with the hearing examiner's discussion and interpretation of the closure statutes presented in conclusion of law no. 1. New appropriations of ground water that is not "immediately or directly connected" to surface water appropriations are allowed within the area of the Upper Missouri River basin closure. Ground water is not immediately or directly connected to surface water if pumping from a well does not induce infiltration into the aquifer from surface flows. With losing streams that are hydrologically connected to the ground water, aquifer infiltration is induced if the cone of depression from the well extends to the stream. With gaining streams, however, the cone of depression may extend to the stream without inducing infiltration. With gaining streams the cone of depression must extend to the stream and reverse the hydraulic gradient between the stream and the aquifer before surface water will infiltrate towards the ground water.

There is competent substantial evidence in the record to establish that the West Gallatin River is a gaining stream and that the cone of depression from the wells reaches the river but does not induce ground water infiltration. Consequently, the record establishes that the ground water is not immediately or directly connected to the surface water. The Department therefore affirms the hearing examiner's conclusion that this Application is for exempt ground water.

Objectors also contend the hearing examiner erred by not addressing the connection between the wells and the fire pond. Objectors argue that if the wells are immediately or directly connected to the pond, then the basin closure is triggered. The Department disagrees. The pond is a manmade excavation, or gravel pit, that filled with ground water. Such water is not surface water. ARM 36.12.101(3). Even if the wells induced infiltration from the pond¹, the wells would still be exempt from the basin closure.

Finally, Objectors except to Applicant's plan for augmentation. Objectors contend that augmentation, though necessary in this case to avoid adverse effect, is not available to allow an appropriation of water subject to the Upper Missouri River basin closure. Objectors point out that augmentation is specifically provided for in the Upper Clark Fork basin closure statutes, Mont. Code Ann. §§ 85-2-335 through 85-2-338, but there is no provision for augmentation in the Upper Missouri River basin closure. The Department agrees that augmentation is not available in the Upper Missouri basin to allow appropriations of water covered by the closure. The Department holds, however, that augmentation is available in the Upper Missouri River basin to avoid adverse effects from appropriations of exempt ground water.

¹ The evidence indicates that the wells do not induce flows from the pond.

Objectors' Requests for Additional Conditions

Objectors suggest that additional data or measurements be required to prove the West Gallatin River is gaining in the vicinity of the wells. The Department has already held that there is substantial credible evidence in the record to support the hearing examiner's finding that the West Gallatin River is gaining. The Department is therefore without authority to require more evidence on the gaining stream issue.

Objectors' also suggest that Objector's be required to measure and report instantaneous and cumulative pumping rates. Objectors' argue that without such measurements, it will be difficult to determine if the terms of the permit are being exceeded. While there may be an opportunity for Objector to increase their diversion undetected, the same could be said of many, if not all, ground water appropriations in the basin. The Department cannot treat this Applicant differently from other ground water appropriators. Applicant should, however, be aware of Mont. Code Ann. § 85-2-115 and that they should be prepared to establish with verifiable records that they are not exceeding the terms of their permit.

Applicant's Exceptions

Applicant has two basic exceptions, (1) that the hearing examiner reduced the use of the cooling wells contrary to the record, and (2) that the proposed order incorrectly requires that Applicant augment the West Gallatin River with their entire 40% share of two existing irrigation rights. Applicant contends that they should only be required to retire 52% of their 40% share of the two water rights. The Department agrees with the Applicant on the first exception and is uncertain on the second.

Applicant argues that the amount of water allowed for the cooling wells should be for 1090 gallons per minute up to 704.10 acre-feet year for the period from January 1 – December 31 instead of 167 gallons per minute up to 56.5 acre feet per year from May 1 – September 30. A review of the entire record, including the testimony of the expert who designed the system does indeed indicate that the cooling wells will be operated year round and that during the hottest days up to 1090 gallons per minute may be required. Testimony of Bruce Nelson and Chris Wasia. Unfortunately Exhibit A2, a memorandum from Applicant's hydrogeologist to the designer of the cooling system, states the following:

"... the heat exchange requirements during the hottest time of the year are satisfied by operating one chiller well at 167 gpm. The heat exchanger wells are equipped with Variable Frequency Drive (VFD) controls so that they can be programmed to provide only that amount of water required to satisfy the heat exchanger demands. Experience has shown that the heat exchanger demand is exceeded by operating a single well at the

lowest setting on the VFD -- 167 gpm. The experience indicates that at full building occupancy, operation of one heat exchanger well at 167 gpm will continue to satisfy the demand. Therefore, the heat exchanger wells are operated in the model at 167 gpm for 12 hours each day from May 1 through September 30."

This statement is the most clear and direct statement in the record of the needs and operations of the heat exchanger system. Applicants introduced the exhibit and both the author and recipients of the memo testified at the hearing and yet this reviewer could find no explanation in the record to reconcile the statement with the amount and period of use requested in the Application. It is understandable that the hearing examiner would focus on the statement. However, the hearing examiner states in finding of fact no. 9, "Applicant's Expert presented evidence on projected impacts **only** for the modeled flow rate of 167 gpm." This finding is not correct and is not supported by competent substantial evidence in the record.

The aquifer test presented in Exhibit A15 provides sufficient information to determine the impacts of pumping the cooling wells at the applied for rates of 1090 gpm up to 704 acre-feet per year. Given the transmissivity and yield of the aquifer determined from the aquifer test coupled with the fact that the cooling wells are non-consumptive, modeling at 1090 gpm would not have altered the model's predictions concerning the cone of depression, adverse effect, or effect on the river. The findings, conclusions and order will be modified to allow operation of the cooling wells up to 1090 gpm and 704 acre-feet from January 1 to December 31. This modification will necessarily require that proposed Condition A. be removed from the permit because the three cooling wells must be pumped simultaneously to yield 1090 gpm.

Applicant excepts that the hearing examiner, in finding of fact no. 12, mistakenly found that 40 % of Applicant's existing irrigation water rights nos. 41H-126909 and 41H-126910 had been offered by Applicant to augment flows in the West Gallatin River and offset consumptive use under this permit. Applicant asserts that the offer is for 52% of 2/5^{ths} of the water rights. Applicant introduced a "water balance" table in Exhibit A20, which seems to show a net gain to the West Gallatin River of 132.90 acre-feet annually if just 52% of 2/5^{ths} of the existing rights were retired. However, the exhibit's author tabulated the entire amounts of the diversions under the existing rights as return flows. While the river in the immediate vicinity of Applicant's diversion for the existing rights would be augmented by the amounts previously diverted, the river below the point where irrigation water previously returned to the river would only be benefited by the amounts previously consumed.

The Department agrees with the hearing examiner that effects on the West Gallatin River from retiring existing rights must be calculated based upon consumptive use under the existing rights. In Exhibit A14, Applicant's expert estimated that consumption from 80 of the 200 acres

(40 %) irrigated under the existing water rights was 108 acre-feet.² The same expert estimated in Exhibit A14 that water demand from the project would be 142 acre-feet with return flows of 72.2 acre-feet. From these figures this reviewer calculates that there would be 70 acre-feet of consumptive use under the permit.³ There is by this accounting more than enough consumption under the existing rights to make up for the consumption under the permit. Retiring only 52% of the existing water rights, however, would add only 56 acre-feet resulting in a 14 acre-feet net loss to the basin.⁴

The record does not appear to entirely support either 40 % or 52% of 2/5^{ths} as the portion of existing water rights that must be retired. The Department will modify Condition D. The condition will not specify the portion of the existing rights that must be retired. The portion can be determined through careful consideration of the change of use applications.

Information and evidence presented with this Application can be considered during the change authorization process. However, the record reveals misunderstanding between the hearing examiner, the attorneys, and the witnesses at the hearing concerning such concepts as consumptive use, beneficial use, depletion, return flow, adverse effect, and capture such that the information and analysis presented at the hearing and in this order should be carefully reviewed.

Applicant has attached an application for change authorization with their exceptions and requests that the Department waives notice and immediately confirm the authorization. The applications for change are not properly before the Department as part of these proceedings and will not be considered now.

Department's Exceptions

Though not raised by the Parties, the Department will note here for future reference that the hearing examiner's finding of fact no. 21 concerning the lack of an immediate or direct connection between the aquifer and Spain-Ferris Ditch was unnecessary and could confuse future applicants. The Spain-Ferris Ditch is neither a natural stream nor tributary to the West Gallatin River. Water in the Spain-Ferris Ditch has already been diverted and appropriated from the basin and therefore is not a proper focus of the basin closure inquiry. Because the

2 Exhibit A14 equates "historical beneficial use" to "consumptive use". The Department views the two terms differently—water does not have to be consumed to be beneficially used.

3 Applicant's exceptions assert that the hearing examiner mistakenly equated capture to consumption. The hearing examiner calculated 69.4 acre-feet of consumptive use using the capture estimate of Applicant's expert. It would appear that Applicant's exception to the hearing examiner equating consumption to capture is moot.

4 $108 \times .52 = 56$.

finding has relevance to the issue of adverse effect and the lack of an immediate or direct connection to the West Gallatin River and because it is supported by substantial credible evidence, the Department will not reject the finding, but future ground water appropriators within the area of the Upper Missouri River Basin closure should not be required to show a lack of an immediate or direct connection with non-tributary irrigation ditches to avoid the closure.

ORDER

Therefore, the Department of Natural Resources and Conservation hereby adopts and incorporates by reference, the Findings of Fact and Conclusions of Law in the Proposal for Decision in this matter except wherever a finding or conclusion may restrict the quantities and period of use to the amounts modeled. The findings and conclusions are hereby modified to reflect that Applicant has established that up to 1090 gpm from January 1 to December 31 is needed for the cooling wells, that this amount of water is legally and physically available, and that there will be no adverse effect from using this amount of water for the cooling wells.

Subject to the terms, conditions, restrictions, and limitations listed below, Beneficial Water Use Permit 41h 11546900 is **GRANTED** to Zoot Properties, LLC, to appropriate 1390 gallons per minute (gpm) up to 885.6 acre-feet of water per year from ground water. The water is diverted using a total of six wells. Three wells are single purpose geothermal cooling wells to appropriate a total of 1090 gpm up to 704.1 acre-feet per year. The three geothermal cooling wells are located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, all in Section 11, Township 02 South, Range 04 East, Gallatin County, Montana. The place of geothermal cooling use is in the SW $\frac{1}{4}$ of Section 11, Township 02 South, Range 04 East, Gallatin County, Montana, between January 1 and December 30 of each year. The remaining three multi purpose production (domestic, commercial, and irrigation) wells, to appropriate a total of 300 gpm up to 181.5 acre-feet, are located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, all in Section 11, Township 02 South, Range 04 East, Gallatin County, Montana. The place of use for the year-round multiple domestic purpose of 45.3 acre-feet, the year-round commercial purpose of 42.5 acre-feet, and the 35- acre irrigation purpose of 93.7 acre-feet, are located in the SW $\frac{1}{4}$ of Section 11, Township 02 South, Range 04 East, Gallatin County, Montana. The irrigation period of diversion and period of use is May 1 through September 30, inclusive, of each year.

A. All water pumped from the cooling wells must be returned to the aquifer via a clean water drain field after use for the geothermal cooling purpose.

B. The Permittee must rotate pumping among the three production wells so no more than one well is pumped at a time. Each well pumping cycle must last no longer than 24 hours. Pumping from more than one well is allowed only for emergency fire protection.

C. The Permittee must apply for and be granted a change authorization from the DNRC for a portion of Water Right Claim Nos. 41H-126909 and 41H-126910 sufficient to off set consumptive use under this Permit. Authorization must be granted before Permittee may begin using water under this Permit. The authorization must protect the water from diversion and change the place of use of each water right to the reach of the West Gallatin River beginning at the current point of diversion (the Beck and Border Ditch) and ending downstream at the point where the West Gallatin River leaves the north side of Sections 10 and 11, Township 02 South, Range 04 East, Gallatin County, Montana.

NOTICE

A person who has exhausted all administrative remedies available within the agency and who is aggrieved by a final decision in a contested case is entitled to judicial review under the Montana Administrative Procedure Act. Title 2, Chapter 4, Mont. Code Ann. A petition for judicial review under this chapter must be filed in the appropriate district court within 30 days after service of the final order. Mont. Code Ann. § 2-4-702.

If a petition for judicial review is filed and a party to the proceeding elects to have a written transcript prepared as part of the record of the administrative hearing for certification to the reviewing district court, the requesting party must make arrangements for preparation of the written transcript. If no request for a written transcript is made, the Department will transmit only a copy of the audio recording of the oral proceedings to the district court.

Dated this 3rd day of June 2005.

Fred Robinson, Legal Counsel
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CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the FINAL ORDER was served upon all parties listed below on this 3rd day of June 2005 by first class United States mail.

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